This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

1. (Currently Amended) A dynamic client-side breadcrumbing method for improving navigation of a plurality of web pages within a Website, the method comprising:

embedding a breadcrumbing engine into a web page being downloaded to a web browser at a client device from a web server associated with the Website, said breadcrumbing engine executed by said web browser for performing the steps of:

(a) generating, at said client, a breadcrumb for each web page downloaded to the web browser associated with the client, the generated breadcrumb including navigation information for each web page downloaded by a user;

(b) storing breadcrumbs associated with web pages downloaded to the web browser at the client;

(c) dynamically updating, at said client, the stored breadcrumbs with the generated breadcrumb to form a breadcrumb navigation trail of breadcrumbs associated with navigation of the web pages visited at the Website without downloading from said web server any information describing a web page's location in a web site hierarchy; and

(d) displaying the formed breadcrumb navigation trail on each downloaded web page for user selection.

2. (Original) The method according to Claim 1, wherein the navigation information includes a title and a uniform resource locator for each downloaded web page.

3. (Original) The method according to Claim 1, further comprising a step of creating a client-side cookie for storing the breadcrumbs associated with web pages downloaded to the web browser.

4. (Original) The method according to Claim 2, further comprising a step of providing the title associated with each downloaded web page within each download web page.

Claims 5 and 6 (Cancelled).

7. (Currently Amended) The method according to Claim 1, wherein the step of dynamically updating the stored breadcrumbs further comprises a step of determining whether the breadcrumb for each downloaded web page is already stored at the client.

8. (Currently Amended) The method according to Claim 7, wherein the step of dynamically updating the stored breadcrumbs further comprises a step of removing the breadcrumb and subsequent breadcrumbs from the stored breadcrumbs if the breadcrumb is determined to be stored at the client.

9. (Currently Amended) The method according to Claim 8, wherein the step of dynamically updating the stored breadcrumbs further comprises appending the

breadcrumb to existing breadcrumbs stored at the client to form the breadcrumb navigation trail if the breadcrumb is determined not to be stored at the client.

10. (Original) The method according to Claim 3, wherein the step of creating further comprises the steps of:

determining whether the client has a client-side cookie and creating the client-side cookie if the client does not have it; and

setting a breadcrumb generated for a downloaded web page into the client side cookie.

11. (Original) The method according to Claim 1, wherein the step of displaying the navigation trail further comprises the following steps:

iterating thru the breadcrumbs in the breadcrumb navigation trail; and

displaying a last breadcrumb in the breadcrumb navigation trail as plain HyperText Markup Language (HTML) and displaying preceding breadcrumbs as HTML links to corresponding web pages.

12. (Currently Amended) A dynamic client-side breadcrumbing system for improving navigation of a plurality of web pages within a Website, the system comprising:

(a) a web server associated with the Website transmitting web pages requested by a client, each of the web pages having a breadcrumbing engine embedded therein by said web server; and

(b) a web browser associated with the client downloading the web pages and executing the breadcrumbing engine, the breadcrumbing engine for:

i) generating, at said client, a breadcrumb for each web page downloaded to the web browser, the generated breadcrumb including navigation information for each downloaded web page,

ii) storing breadcrumbs associated with web pages downloaded to the web browser at the client,

iii) dynamically updating, at said client, the stored breadcrumbs with the generated breadcrumb to form a breadcrumb navigation trail of breadcrumbs associated with navigation of the web pages visited at the Website without downloading from said web server any information describing a web page's location in a web site hierarchy, and

iv) displaying the formed breadcrumb navigation trail on each downloaded web page for user selection.

13. (Original) The dynamic client-side breadcrumbing system according to Claim 12, wherein the navigation information includes a title and a uniform resource locator for each downloaded web page.

14. (Original) The dynamic client-side breadcrumbing system according to Claim 12, wherein the breadcrumbing engine is further for creating a client-side cookie to store breadcrumbs associated with web pages downloaded to the web browser.

15. (Original) The dynamic client-side breadcrumbing system according to Claim 13, wherein a title associated with each downloaded web page is provided within each downloaded web page.

Claim 16 (Cancelled).

17. (Original) The dynamic client-side breadcrumbing system according to Claim 12, wherein the breadcrumbing engine further comprises determining whether the breadcrumb for each downloaded web page is stored at the client.

18. (Original) The dynamic client-side breadcrumbing system according to Claim 17, wherein the breadcrumbing engine further comprises removing the breadcrumb and subsequent breadcrumbs from stored breadcrumbs if the breadcrumb is determined to be stored at the client.

19. (Original) The dynamic client-side breadcrumbing system according to Claim 18, wherein the breadcrumbing engine further comprises appending the breadcrumb to preceding breadcrumbs stored at the client if the breadcrumb is determined not to be stored at the client.

20. (Original) The dynamic client-side breadcrumbing system according to Claim 14, wherein the breadcrumbing engine further comprises determining whether the client has the client-side cookie and creating the client side cookie if the client does not have it, and

the breadcrumbing engine further setting a breadcrumb generated for a downloaded web page into the client side cookie.

21. (Original) The dynamic client-side breadcrumbing system according to Claim 12, wherein the breadcrumbing engine further comprises iterating thru the breadcrumbs in breadcrumb navigation trail and displaying a last breadcrumb in the breadcrumb navigation trail as plain HyperText Markup Language (HTML) and displaying preceding breadcrumbs as HTML links.

22. (Currently Amended) A program storage device, tangibly embodying a program of instructions executable by the machine to perform a dynamic client-side breadcrumbing method for improving navigation of a plurality of web pages within a Website, the method comprising:

embedding a breadcrumbing engine into a web page being downloaded to a web browser at a client device from a web server associated with the Website, said breadcrumbing engine executed by said web browser for performing the steps of:

(a) generating, at said client, a breadcrumb for each web page downloaded to the web browser associated with the client, the generated breadcrumb including navigation information for each web page downloaded by a user;

(b) storing breadcrumbs associated with web pages downloaded to the web browser at the client;

(c) dynamically updating, at said client, the stored breadcrumbs with the generated breadcrumb to form a breadcrumb navigation trail of breadcrumbs associated

with navigation of the web pages visited at the Website without downloading from said web server any information describing a web page's location in a web site hierarchy; and

(d) displaying the formed breadcrumb navigation trail on each downloaded web page for user selection.

23. (Original) The program storage device according to Claim 22, wherein the navigation information includes a title and a uniform resource locator for each downloaded web page.

24. (Original) The program storage device according to Claim 22, the method further comprising creating a client-side cookie to store breadcrumbs associated with web pages downloaded to the web browser.

25. (Original) The program storage device according to Claim 23, the method further comprising a step of providing the title associated each downloaded web page within each download web page.

Claims 26 and 27 (Cancelled).

28. (Currently Amended) The program storage device according to Claim 22, wherein the method step of dynamically updating stored breadcrumbs further comprises a step of determining whether the breadcrumb for each downloaded web page is already stored at the client.

29. (Currently Amended) The program storage device according to Claim 28, wherein the method step of dynamically updating the stored breadcrumbs further comprises a step of removing the breadcrumb and subsequent breadcrumbs from the stored breadcrumbs if the breadcrumb is determined to be stored at the client.

30. (Currently Amended) The program storage device according to Claim 29, wherein the method step of dynamically updating the stored breadcrumbs further comprises a step of appending the breadcrumb to existing breadcrumbs stored at the client to form the breadcrumb navigation trail if the breadcrumb is determined not to be stored at the client.

31. (Original) The program storage device according to Claim 24, wherein the step of creating further comprises the steps of:

determining whether the client has a client-side cookie and creating the client-side cookie if the client does not have it; and

setting a breadcrumb generated for a downloaded web page into the client side cookie.

32. (Original) The program storage device according to Claim 22, wherein the method step of displaying the navigation trail further comprises the following steps:

iterating thru the breadcrumbs in the breadcrumb navigation trail; and

displaying a last breadcrumb in the breadcrumb navigation trail as plain HyperText Markup Language (HTML) and displaying preceding breadcrumbs as HTML links to corresponding web pages.

33. (Currently Amended) A dynamic client-side breadcrumbing method for improving navigation of a plurality of web pages within a Website, the method comprising:

embedding a breadcrumbing engine into a web page being downloaded to a web browser at a client device from a web server associated with the Website, said breadcrumbing engine executed by said web browser for performing the steps of:

(a) generating and storing breadcrumbs associated with web pages downloaded to the web browser from the web server associated with the Website at the client, the breadcrumbs including navigation information associated with downloaded web pages and forming a breadcrumb navigation trail of breadcrumbs associated with navigation of the web pages at the Website without downloading from said web server any information describing a web page's location in a web site hierarchy;

(b) setting a time stamp corresponding to the breadcrumb navigation trail and storing the time stamp at the client;

(c) downloading a subsequent web page and retrieving the time stamp corresponding to the breadcrumb navigation trail stored at the client;

(d) determining whether a time interval between the time stamp and a time corresponding to the subsequent downloaded web page exceeds a threshold; and

(e) enabling resumption of navigation according to the breadcrumb navigation trail by enabling downloading of a web page according to navigation information of a last breadcrumb in the breadcrumb navigation trail and displaying the breadcrumb navigation trail on the downloaded web page if the time interval exceeds the threshold.

34. (Original) The method according to Claim 33, wherein the navigation information includes a title and a uniform resource locator for each downloaded web page.

35. (Original) The method according to Claim 33, further comprising a step of creating a client-side cookie to store the breadcrumbs associated with web pages downloaded to the web browser and the time stamp corresponding to the breadcrumb navigation trail.

Claim 36 (Cancelled).

37. (Original) The method according to Claim 36, the method further comprising a step of defining the threshold within the breadcrumbing engine of each downloaded web page.

38. (Original) The method according to Claim 33, the method further comprising a step of prompting a user regarding whether the user would like to resume navigation according to the breadcrumb navigation trail.

39. (Original) The method according to Claim 38, wherein if the user chooses to resume navigation according to the breadcrumb navigation trail, the method further comprises a step of setting the time stamp associated with the breadcrumb navigation trail to the time associated with downloading of the web page according to navigation information of a last breadcrumb in the breadcrumb navigation trail and storing the time stamp at the client.

40. (Original) The method according to Claim 38, wherein if the user chooses not to resume navigation according to the breadcrumb navigation trail, the method further comprises the steps of:

deleting all breadcrumbs stored at the client and storing a breadcrumb generated for the subsequent downloaded web page at the client to form a new breadcrumb navigation trail;

setting the time stamp to the time associated with the subsequent downloaded web page and storing the time stamp at the client; and

displaying the new breadcrumb navigation trail on the subsequent downloaded web page.

41. (Currently Amended) A dynamic client-side breadcrumbing system for improving navigation of a plurality of web pages within a Website, the system comprising:

(a) a web server associated with the Website transmitting web pages requested by a client, each of the web pages having a breadcrumbing engine embedded therein by said web server; and

(b) a web browser associated with the client downloading the web pages and executing the breadcrumbing engine, the breadcrumbing engine for:

i) generating and storing breadcrumbs associated with web pages downloaded to the web browser from the web server associated with the Website at the client, the breadcrumbs including navigation information associated with downloaded web pages and forming a breadcrumb navigation trail according to user navigation of

web pages at the Website without downloading from said web server any information describing a web page's location in a web site hierarchy,

ii) setting a time stamp corresponding to the breadcrumb navigation trail and storing the time stamp at the client,

iii) determining whether a time interval between the time stamp and a time corresponding to a subsequent downloaded web page exceeds a threshold, and

iv) enabling resumption of navigation according to the breadcrumb navigation trail by enabling downloading of a web page according to navigation information of a last breadcrumb in the breadcrumb navigation trail and displaying the breadcrumb navigation trail on the downloaded web page if the time interval exceeds the threshold.

42. (Original) The system according to Claim 41, wherein the navigation information includes a title and a uniform resource locator for each downloaded web page.

43. (Original) The system according to Claim 41, wherein the breadcrumbing engine further creating a client-side cookie to store the breadcrumbs associated with the web pages downloaded to the web browser and the time stamp corresponding to the breadcrumb navigation trail.

Claim 44 (Cancelled).

45. (Original) The system according to Claim 41, wherein a threshold is defined within the breadcrumbing engine of each downloaded web page.

46. (Original) The system according to Claim 41, wherein the breadcrumbing engine further prompting a user regarding whether the user would like to resume navigation according to the breadcrumb navigation trail.

47. (Original) The system according to Claim 46, wherein if the user chooses to resume navigation according to the breadcrumb navigation trail, the breadcrumbing engine further setting the time stamp associated with the breadcrumb navigation trail to the time associated with downloading of the web page according to navigation information of a last breadcrumb in the breadcrumb navigation trail and storing the time stamp at the client.

48. (Original) The system according to Claim 46, wherein if the user chooses not to resume navigation according to the breadcrumb navigation trail, the breadcrumbing engine:

deleting all breadcrumbs stored at the client and storing a breadcrumb generated for the subsequent downloaded web page at the client form a new breadcrumb navigation trail;

setting the time stamp to the time associated with the subsequent downloaded web page and storing the time stamp at the client; and

displaying the new breadcrumb navigation trail on the subsequent downloaded web page.

49. (Currently Amended) A program storage device, tangibly embodying a program of instructions executable by the machine to perform a dynamic client-side breadcrumbing method for improving navigation of a plurality of web pages within a Website, the method comprising the steps of:

embedding a breadcrumbing engine into a web page being downloaded to a web browser at a client device from a web server associated with the Website, said breadcrumbing engine executed by said web browser for performing the steps of:

(a) generating and storing breadcrumbs associated with web pages downloaded to a web browser from a web server associated with the Website at a client, the breadcrumbs including navigation information associated with downloaded web pages and forming a breadcrumb navigation trail according to user navigation of the web pages within the Website without downloading from said web server any information describing a web page's location in a web site hierarchy;

(b) setting a time stamp corresponding to the breadcrumb navigation trail and storing the time stamp at the client;

(c) downloading a subsequent web page and retrieving the time stamp corresponding to the breadcrumb navigation trail stored at the client;

(d) determining whether a time interval between the time stamp and a time corresponding to the subsequent downloaded web page exceeds a threshold; and

(e) enabling resumption of navigation according to the breadcrumb navigation trail by enabling downloading of a web page according to navigation information of a last breadcrumb in the breadcrumb navigation trail and displaying the breadcrumb navigation trail on the downloaded web page if the time interval exceeds the threshold.

50. (Currently Amended) The program storage device according to Claim [[44]] 49, wherein the navigation information includes a title and a uniform resource locator for each downloaded web page.

51. (Original) The program storage device according to Claim 49, the method further comprising creating a client-side cookie to store the breadcrumbs associated with web pages downloaded to the web browser and the time stamp corresponding to the breadcrumb navigation trail.

Claim 52 (Cancelled).

53. (Original) The program storage device according to Claim 49, the method further comprising a step of defining the threshold within the breadcrumbing engine of each downloaded web page.

54. (Original) The program storage device according to Claim 49, the method further comprising a step of prompting a user regarding whether the user would like to resume navigation according to the breadcrumb navigation trail.

55. (Original) The program storage device according to Claim 54, wherein if the user chooses to resume navigation according to the breadcrumb navigation trail, the method further comprises a step of setting the time stamp associated with the breadcrumb navigation trail to the time associated with downloading of the web page according to navigation information of a last breadcrumb in the breadcrumb navigation trail and storing the time stamp at the client.

56. (Original) The method according to Claim 54, wherein if the user chooses not to resume navigation according to the breadcrumb navigation trail, the method further comprises the steps of:

deleting all breadcrumbs stored at the client and storing a breadcrumb generated for the subsequent downloaded web page at the client to form a new breadcrumb navigation trail;

setting the time stamp to the time associated with the subsequent downloaded web page and storing the time stamp at the client; and

displaying the new breadcrumb navigation trail on the subsequent downloaded web page.

57. (Currently Amended) A breadcrumbing engine to be embedded into a plurality of web pages within a Website for execution at a client web browser for improving navigation of the plurality of web pages within the Website, the breadcrumbing engine comprising:

(a) mechanism for generating, at said client, a breadcrumb for each web page downloaded to a web browser associated with a client from a web server associated with the Website, the generated breadcrumb including navigation information for each downloaded web page;

(b) mechanism for storing breadcrumbs associated with web pages downloaded to the web browser at the client;

(c) mechanism for dynamically updating, at the client, the stored breadcrumbs with the generated breadcrumb to form a breadcrumb navigation trail of breadcrumbs associated with navigation of the web pages at the Website without downloading from said web server any information describing a web page's location in a web site hierarchy; and

(d) mechanism for displaying the breadcrumb navigation trail on each downloaded web page for user selection.

58. (Currently Amended) A breadcrumbing engine to be embedded into a plurality of web pages within a Website for execution at a client web browser for improving navigation of the plurality of web pages within the Website, the breadcrumbing engine comprising:

(a) mechanism for generating and storing breadcrumbs associated with web pages downloaded to a web browser from a web server associated with the Website at a client, the breadcrumbs including navigation information associated with downloaded web pages and forming a breadcrumb navigation trail according to user navigation of web pages at the Website without downloading from said web server any information describing a web page's location in a web site hierarchy;

(b) mechanism for setting a time stamp corresponding to the breadcrumb navigation trail and storing the time stamp at the client;

(c) mechanism for determining whether a time interval between the time stamp and a time corresponding to a subsequent downloaded web page exceeds a threshold; and

(d) mechanism for enabling resumption of navigation according to the breadcrumb navigation trail by enabling downloading of a web page according to navigation information of a last breadcrumb in the breadcrumb navigation trail and displaying the breadcrumb navigation trail on the downloaded web page if the time interval exceeds the threshold.